ABSTRACT

The specification describes an improved optical fiber cable wherein the cable cross section is round and contains a plurality of bundled optical fibers. The bundle may comprise randomly arranged optical fibers or optical fibers aligned in a ribbon configuration. The bundle is encased in a polymer encasement that couples mechanically to the optical fibers. In some embodiments the encasement is relatively hard, and is deliberately made to adhere to the optical fiber bundle. Consequently the encasement medium functions as an effective stress translating medium that deliberately translates stresses on the cable to the optical fibers. The cable construction of the invention is essentially void free, and provides a dry cable with water blocking capability.